Retina

Retina is the neurosensory part of the eye where the images are formed.

It can be affected by several diseases.

Floaters

It's a visual symptom in which a person sees an insect or hair like object moving in front of one's eye

Floaters are one of the commonest eye complaints in the middle ages and the elderly. But they can happen in the young too, particularly in those wearing glasses.

The cause is the presence of some opacity in the normally clear vitreous gel of our eyes.

In the majority of the cases the cause is the physiological degeneration of the vitreous gel that happens with ageing. Usually they are innocuous and require no treatment.

In some cases the cause may be serious like bleeding in the vitreous gel.

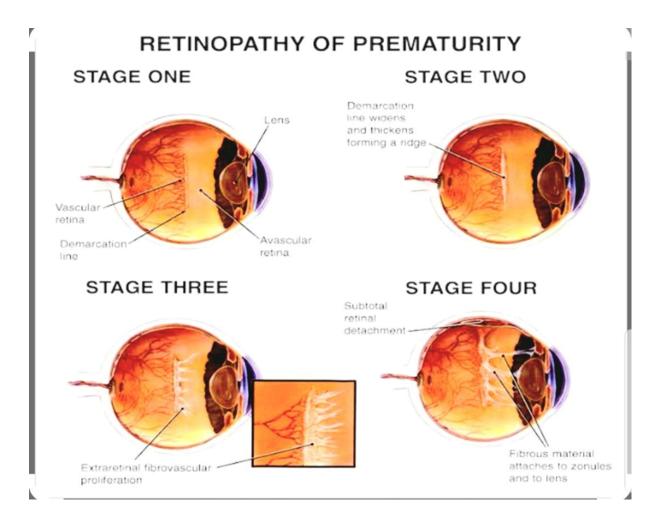
Hence consultation with a retina specialist is advisable.

Treatment in the majority of the cases is not needed.

In cases where there's a pathology behind the symptoms, the underlying cause has to be treated.

Retinopathy of Prematurity (ROP)

In children who are born prematurely, their eyes, particularly the retina, are undeveloped. If exposed to high oxygen given to the newborn, the retina may develop abnormal blood vessels. These can bleed and further cause retinal detachment with irreversible loss of vision. Unfortunately this process is usually bilateral.



ROP can be detected by timely examination of the retina of such newborns. If needed LASER can be applied to the retina and such serious complications prevented.

The good news is that such facilities are now available in Ayodhya itself at our Raghuvansham Hospital.

Diabetic Retinopathy

The incidence of diabetes is on steady rise due to lifestyle changes.

Approximately 25% of diabetics can develop diabetes related complications related to eyes, kidney, nerves etc

In the eyes the retina is particularly affected. The blood vessels in the retina start oozing out blood. Gradually they start getting occluded causing weakness of the retina. They might rupture causing bleeding within the eye.

Finally the retina may detach.

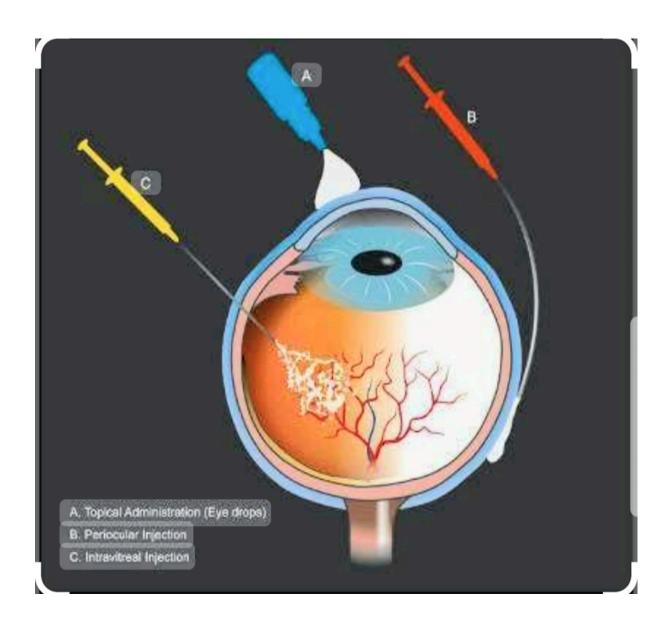


Normal Retina. Diabetic Retinopathy

Treatment for Diabetic Retinopathy

The treatment for Diabetic Retinopathy depends on its stage.

Injections in the eye -



Intravitreal injections are the latest treatment for early stages of Diabetic Retinopathy.

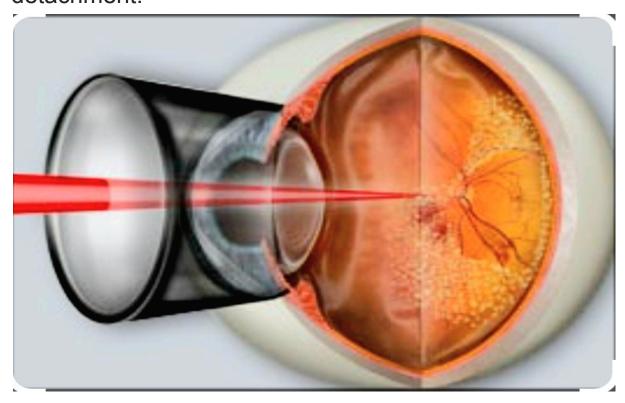
They cause a decrease in the swelling of the retina. The effect is temporary. Hence they have to be repeated.

They are of 2 broad categories.

Anti VEG F- Avastin, Razumab, Accentrix, Lucentis, Eylea etc.

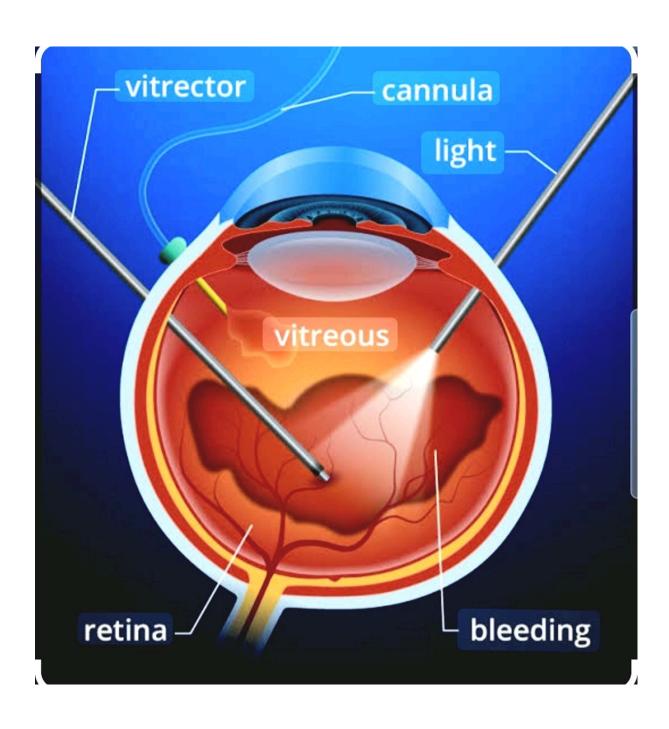
Steroids - Triamcinolone, Azurdex etc.

LASERs- They are applied all over the retina to reduce the chances of bleeding and Retinal detachment.



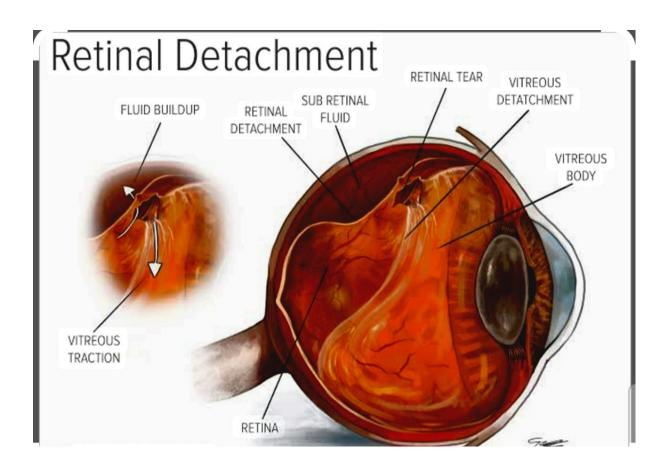
Surgery -

Vitreo-Retinal surgery may be needed if there is bleeding in the eye (Vitreous hemorrhage) or the retina detaches(Tractional Retinal Detachment)



Retinal detachment

It is the separation of the two layers of the retina. It is of two types



Rhegmatogenous -

In this case the detachment is due to a tear or hole in the retina.

Tractional -

Here the retina detaches due to the pull of fibrous tissues.

Exudative -

Inflammation causes accumulation of fluid between the two layers of retina

causing them to separate.

Prevention -

Retinal detachment can be prevented to some extent by routine examination of high risk cases like myopes and diabetics.

On detection of holes or tears or diabetic retinopathy LASER can be applied to prevent retina from detaching.

Raghuvansham Hospital is equipped with a modern high tech LASER machine for this purpose.

Treatment -

In Exudative detachment since the fluid is due to inflammation, medical treatment of the inflammation causes resolution of the detachment.

The other two common varieties are due to structural changes in the vitreo retina.

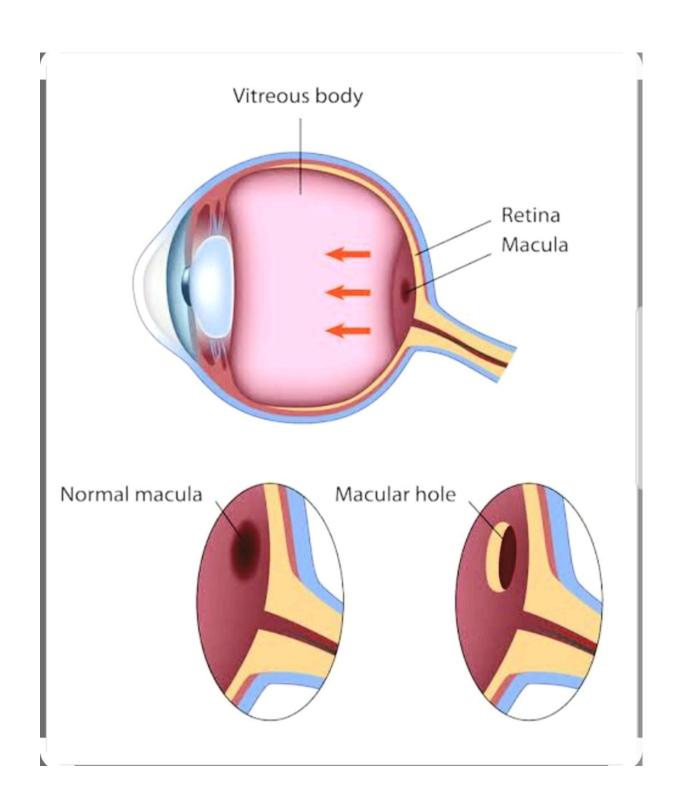
Hence surgical correction is needed.

At Raghuvansham Hospital surgeries for all such conditions are done by our expert surgeon using the latest state of the art vitrectomy machine.

Macular hole

Macula is the central part of the retina which is responsible for our central sharp vision.

In some people with age it can develop holes in the centre. This causes a drop in the central sharp vision.



Causes -

Sometimes macular holes may develop due to injury to the eye.

But in the majority of the cases it's the physiological changes happening in the eye with ageing.

Treatment -

Some holes, particularly traumatic ones, close spontaneously.

But in majority surgical treatment is needed. Raghuvansham Hospital is equipped with modern vitrectomy machine and retina viewing system for successful surgical treatment of this

Cataract

Cataract is the clouding of our normal clear lens. It could be due to various causes.



Senile - This is the commonest type and happens due to ageing.

Congenital - Rarely cataract may be present at birth.

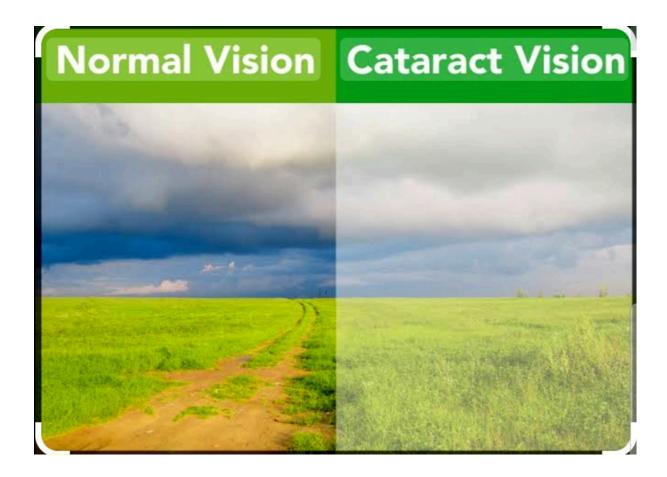
Developmental - Sometimes cataracts can develop at an early age.

Steroids induced - Cataract can also develop due to prolonged use of steroids (A type of medicine)

Complicated - Cataracts can develop in people having other eye diseases like long standing or recurrent uveitis.

Traumatic - Any form of trauma to the eye can result in development of cataract.

Symptoms



Decreasing vision is the commonest complaint.

There can be glare while night driving.

Sometimes there can be double vision.

If cataract is not operated for long, it may rupture, then there will be severe pain in the eye and headache.

Treatment

Medicines - As of now there is no medicine to prevent or treat cataract.

Glasses - In early stages glasses might help in improving vision although the quality of vision will be suboptimal.

Surgery -

The definitive treatment of cataract is to remove it surgically and replace it with an artificial lens.

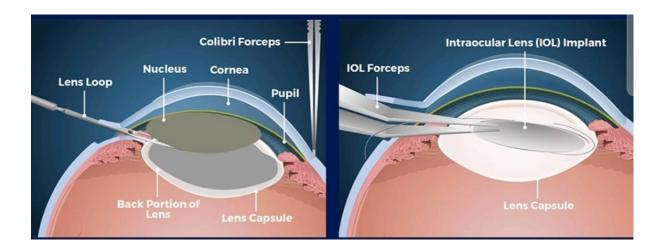
Types of surgeries

Small Incision Cataract Surgery (SICS)-

In this procedure a cut (6-8 mm) is made in the upper part of the eye and the cataract is removed in toto manually and replaced with an artificial lens.

Because of the size of the cataractous

lens and the artificial lens the size of the cut is relatively bigger.



After surgery there is some pain and redness in the upper part of the eye.

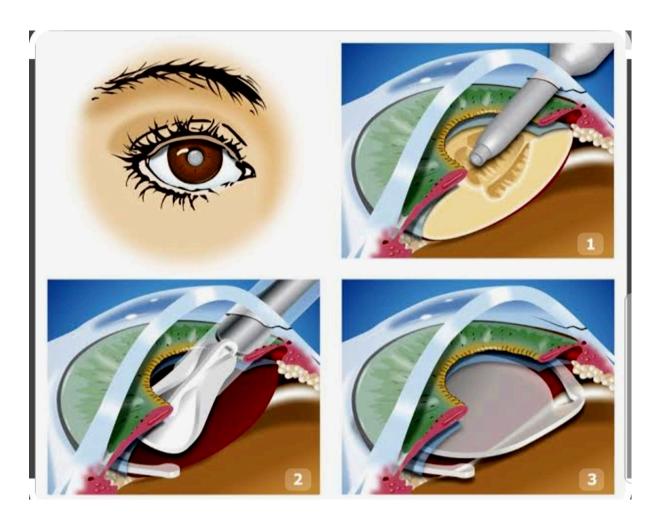
The glasses too have relatively more power.

Phacoemulsification(Phaco)-

In this procedure the cataractous lens is emulsified and sucked out using a machine and a foldable artificial lens is implanted.

Because of this the cut that is made is less than half of the manual surgery (2.2 to 2.8 mm).

Also the cut is made in the cornea(the black portion of the eye) which doesn't bleed. Hence usually there is no redness or pain.



At Raghuvansham Hospital we are performing all cataract surgeries by the latest phacoemulsification techniques. Also in all cases we insert the latest foldable lenses.

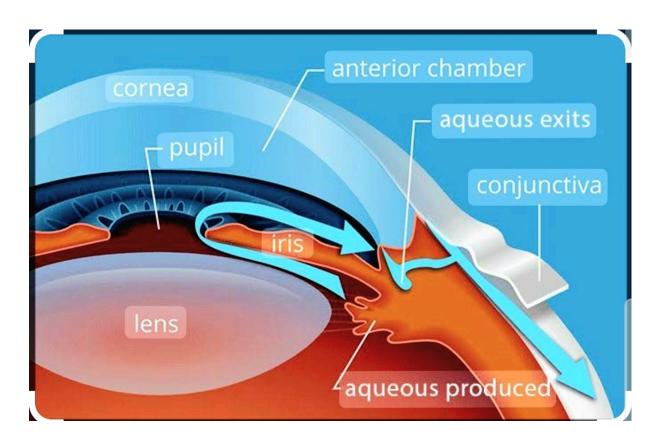
Glaucoma

It's a condition in which the pressure of the eye starts rising with resultant damage to the optic nerve.

Physiology

The shape of the eye is maintained by the presence of fluid (humor) inside it.

This fluid is continuously formed by the ciliary processes and drained at the angle of the eye by the trabecular meshwork.



If the fluid starts accumulating in the eye either due to increased production or decreased drainage, it will cause an increase in the pressure of the eye.

But in the majority of the cases the culprit is the decreased drainage.

Types

Primary glaucoma -

Here the glaucoma is not associated with any other disease of the eye.

It is again of two types

Primary open angle glaucoma

In this condition the drainage is decreased due to narrowing of the trabecular meshwork.

Primary closed angle glaucoma

Here the angle of the eye which launches trabecular meshwork is narrow.

These individuals can have sudden rise in eye pressure when their pupils dilate, like in darkness.

Treatment

LASER

In individuals with narrow angles, often a hole is made in their iris (the brown part) using LASER to prevent sudden rise in eye pressure.

Eye drops

Most cases of glaucoma are initially treated with pressure lowering eye drops.

If this is adequate one might need to

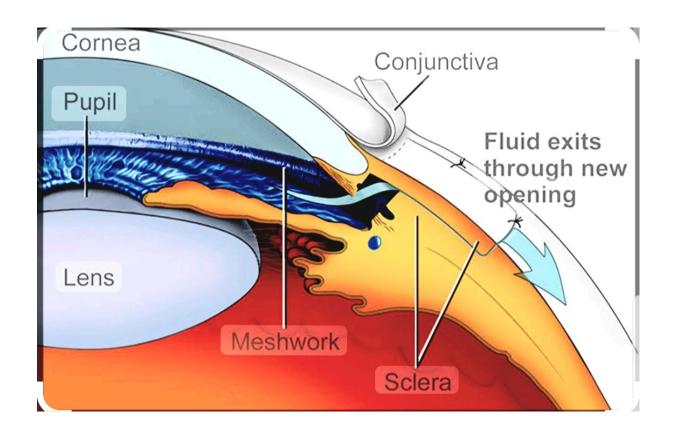
continue the drops life long.

Surgery

If the eye pressure is not controlled by the above two, surgery is indicated.

The surgery consists of creating an artificial path for the eye fluid to drain.

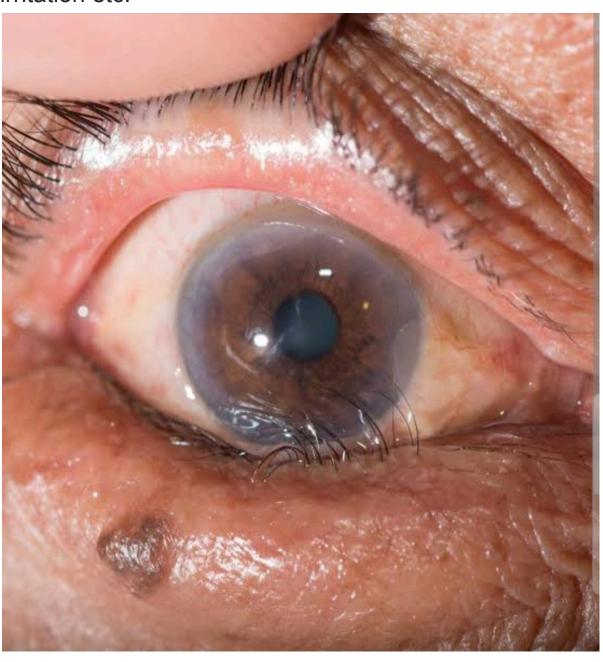
This is called Trabeculectomy.



Eyelids

Entropion

It is the inward turning of the eyelid. This causes rubbing of the eye lashes on the cornea, with resultant symptoms like watering, foreign body sensation, irritation etc.



The commonest cause is age related weakness of the supporting structures of the eyelid.

It can also be due to stiffness and shortness of the eye lid following

inflammation or injury.

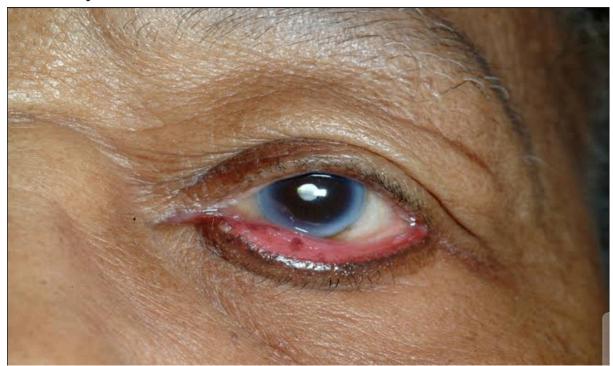
Treatment is surgical correction of the underlying cause.

At Raghuvansham Hospital our expert surgeon has vast experience in treating such cases.

Ectropion

It's the outward turning of the eyelid.

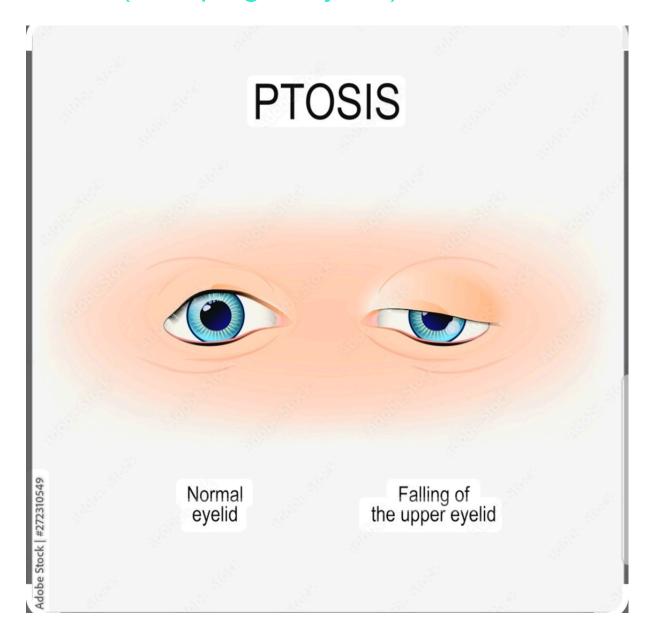
The cause is mostly age-related laxity of the structures of the eyelid.



Treatment is surgical correction of the cause.

At Raghuvansham Hospital we are providing these treatments with excellent results.

Ptosis (Drooping of eyelid)



Ptosis can be present from birth due to weakness of the muscle responsible for lifting the eyelid.

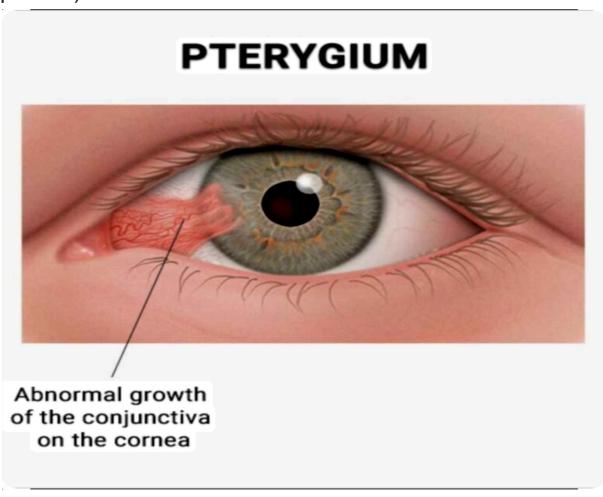
It can also develop later in life due to various causes like trauma, inflammation or neurological weakness.

Treatment is based on etiology. In neurological cases the cause is treated.

Whereas in the majority of other cases surgical correction is needed.

Cornea

Pterygium - Pterygium is an ingrowth of the conjunctiva(the white portion) over the cornea (the black portion).

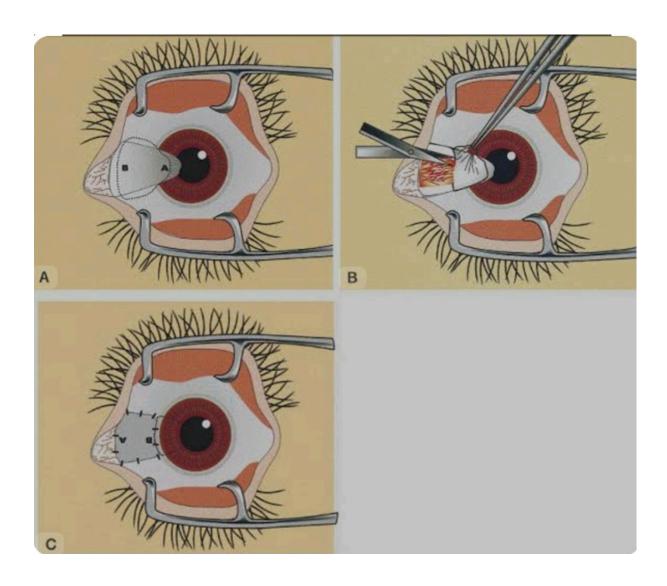


The causes are said to be genetic, prolonged exposure to sunlight, dust etc.

When small it can be treated symptomatically by artificial tears.

When it gets enlarged, it should be removed surgically.

But simple surgical removal causes recurrence in the majority of the cases. Hence an autograft of the conjunctiva is placed at the bare area to prevent the recurrence.



At Raghuvansham Hospital we are performing this surgery with excellent results.